

FIGURE 1

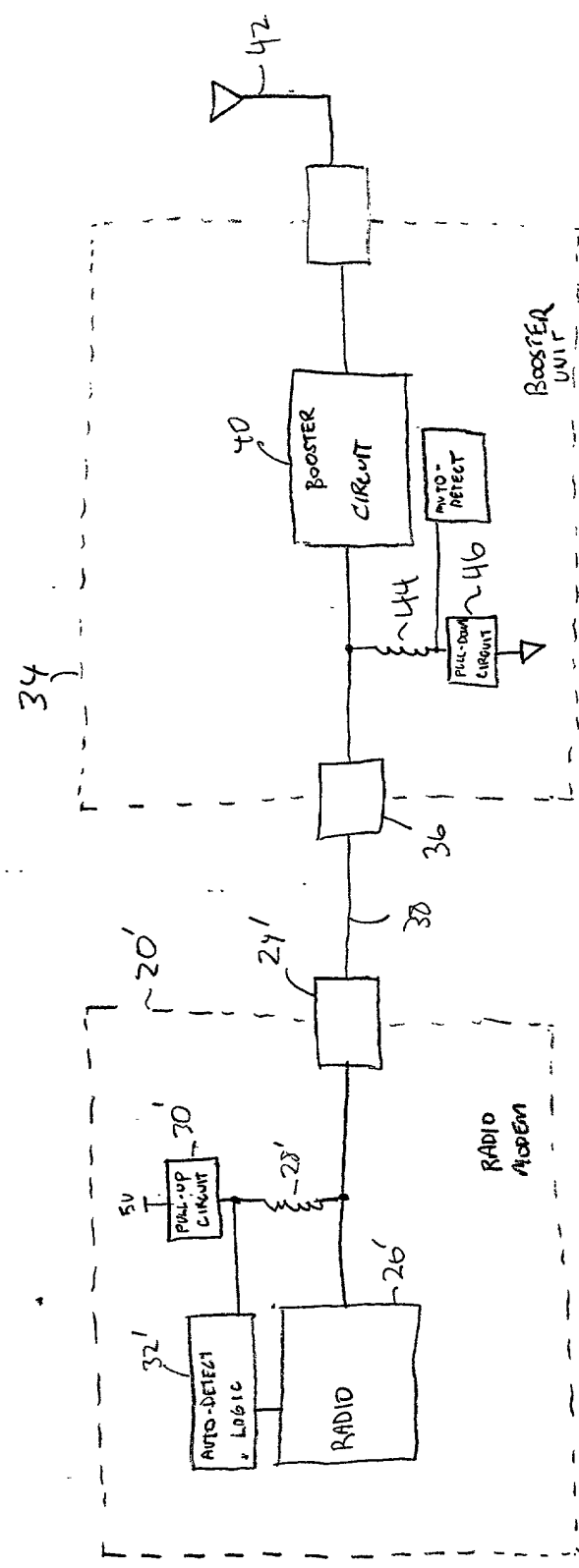


FIGURE 2

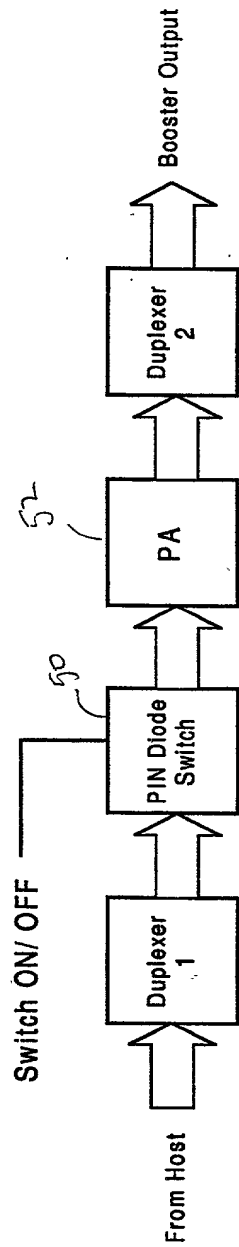


FIGURE 3

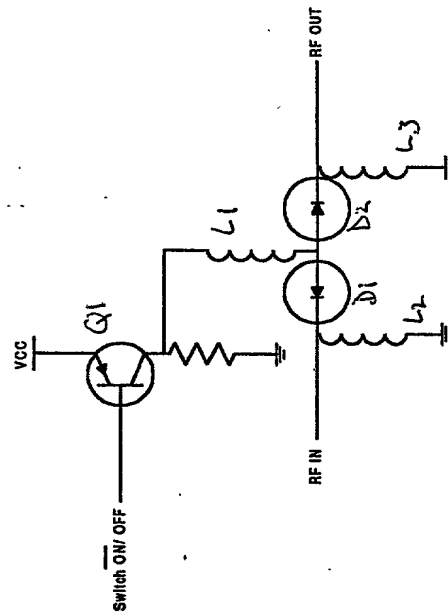


FIGURE 4

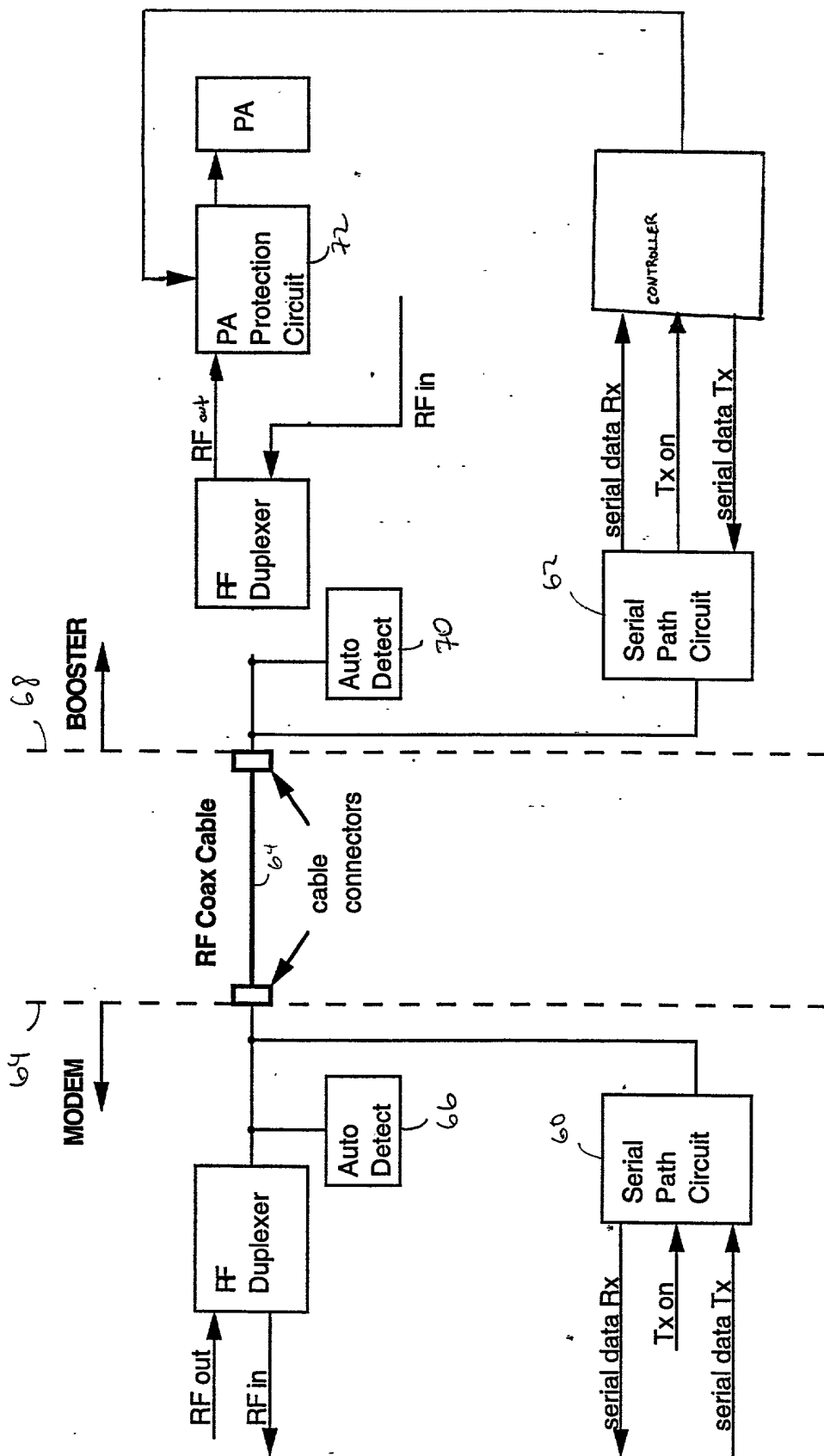
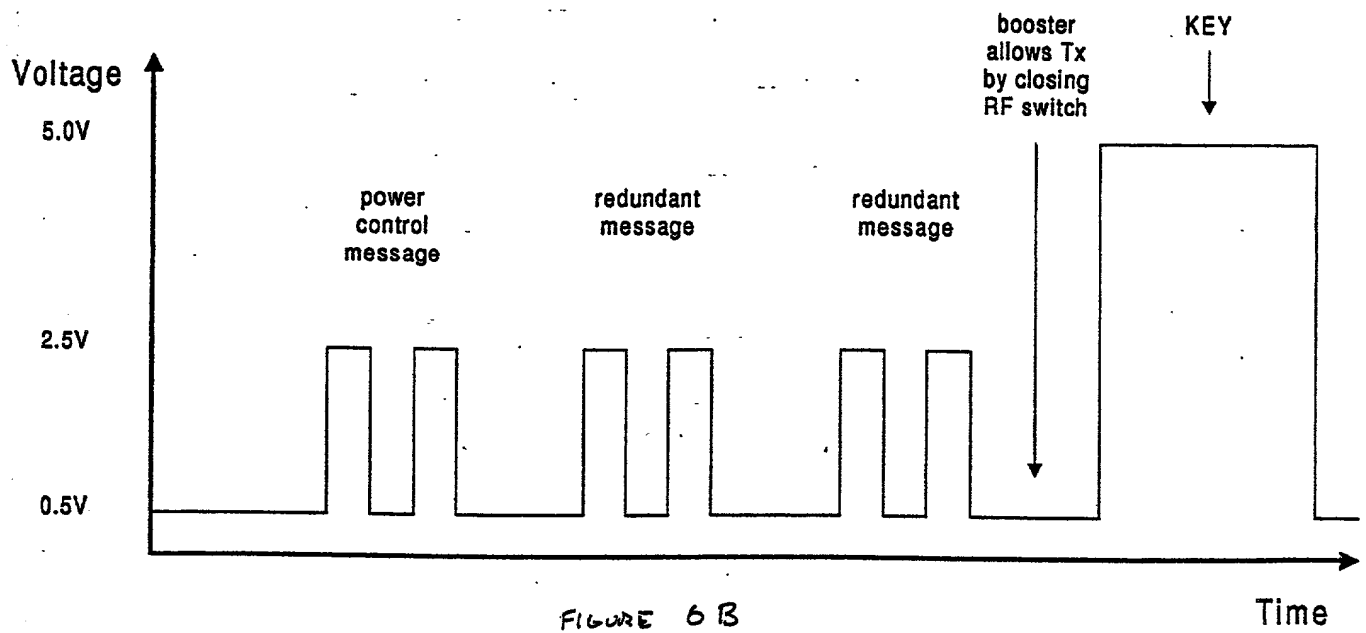
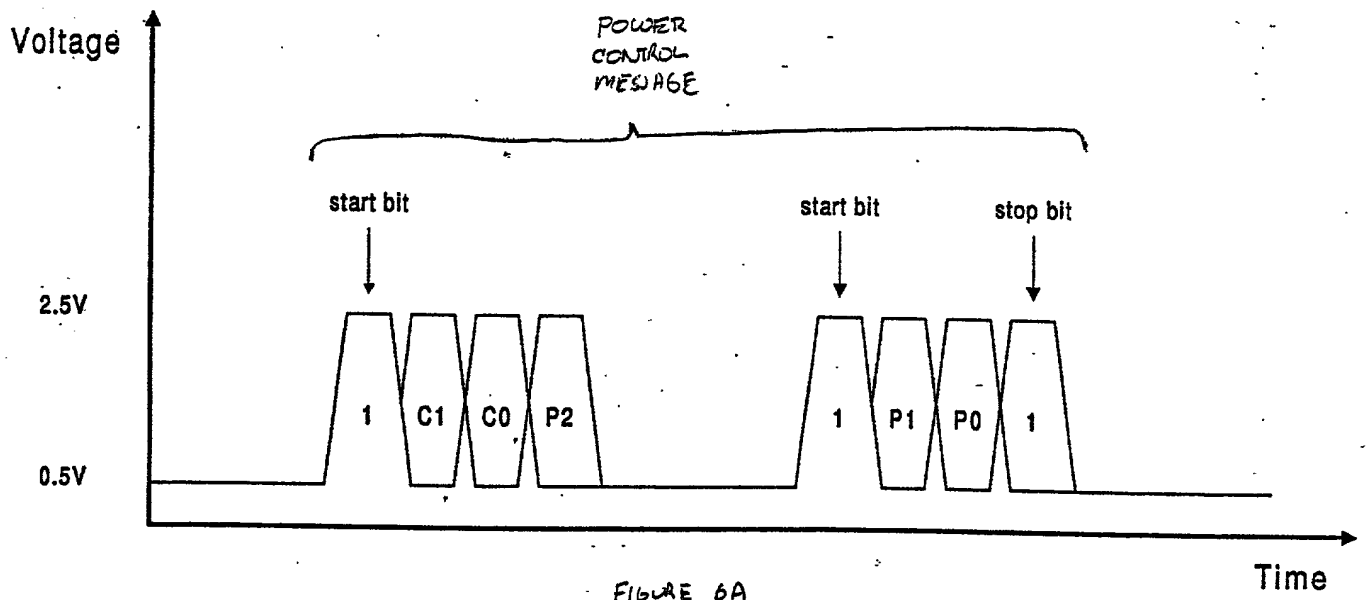


FIGURE 5



C[1:0] denote channel band (low, mid, or high)
P[2:0] denote power level (0 through 7)

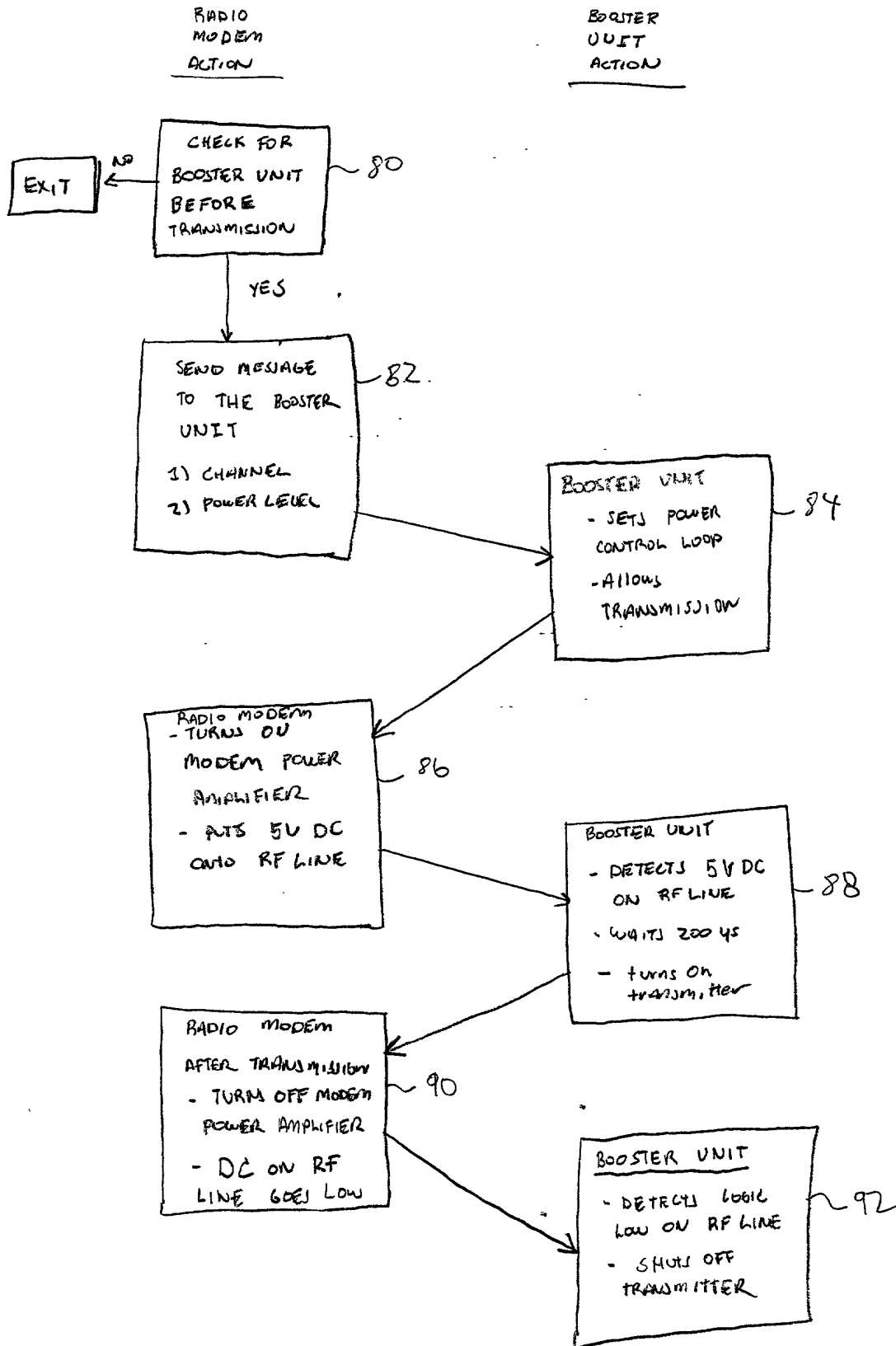


FIGURE 7

The schematic diagram is divided into two main sections: **Modem** and **Booster**, separated by a dashed line.

Modem Section:

- RF Front-End:** Features a TX RF antenna connected to an RF Duplexer. The RX RF antenna is also connected to the RF Duplexer. A series capacitor C3 follows the duplexer.
- Matching Network:** A series inductor L1 is connected to the output of C3. A shunt capacitor C1 is connected to ground after L1.
- Control Logic:**
 - Serial Data RX is connected to the input of inverter U1.
 - TX On is connected to the input of inverter U2.
 - Serial Data TX is connected to the input of inverter U3.
 - The output of U2 (labeled OC) is connected to the input of U3.
 - The output of U3 is connected to a resistor R2, which is then connected to the junction between L1 and C1.
 - A resistor R1 is connected to ground from the junction between C3 and L1.

Booster Section:

- RF Front-End:** Features a TX RF antenna connected to an RF Duplexer. The RX RF antenna is also connected to the RF Duplexer. A series capacitor C4 follows the duplexer.
- Matching Network:** A series inductor L2 is connected to the output of C4. A shunt capacitor C2 is connected to ground after L2.
- Control Logic:**
 - The output of the shunt capacitor C2 is connected to the input of inverter U4 (labeled X).
 - The output of U4 is connected to the input of inverter U5 (labeled Y).
 - The output of U5 is connected to a resistor R3, which is then connected to the input of inverter U6 (labeled OC).
 - The output of U6 is connected to the Serial Data TX line.

FIGURE 8